

1. A composition comprising a reduced folate compound and a cobalamin compound in amounts sufficient to exert a chondroprotective effect.

5 2. The composition of claim 1, wherein the ratio of said reduced folate compound and said cobalamin ranges from 2.5:1 to 125:1.

10 3. The composition of claim 1, wherein said reduced folate compound is present in an amount from 0.01 mg to 500 mg and said cobalamin compound is present in an amount from 0.0002 mg to 10 mg.

15 4. The composition of claim 1, wherein said reduced folate compound is present in an amount from 0.1 mg to 50 mg and said cobalamin compound is present in an amount from 0.002 mg to 1 mg.

5. The composition of claim 1, wherein said composition does not comprise folic acid.

6. The composition of claim 1, wherein said composition further comprises a betaine compound.

20 7. The composition according to claim 6, wherein said betaine compound is present in amounts of from 50 mg to 20,000 mg.

25 8. The composition according to claim 6, wherein said betaine compound is present in amounts of from 500 mg to 2000 mg.

9. The composition of claim 1, wherein said reduced folate compound is 5-methyl-tetrahydrofolate.

10. The composition of claim 1, wherein said reduced folate is selected from the group consisting of (6S)-tetrahydrofolic acid, 5-methyl-(6S)-tetrahydrofolic acid, 5-formyl-(6S)-tetrahydrofolic acid, 10-formyl-(6R)-tetrahydrofolic acid, 5,10-methylene-(6R)-tetrahydrofolic acid, 5,10-methenyl-(6R)-tetrahydrofolic acid, 5-formimino-(6S)-tetrahydrofolic acid, (6R,S)-tetrahydrofolic acid, 5-methyl-(6R,S)-tetrahydrofolic acid, 5-formyl-(6R,S)-tetrahydrofolic acid, 10-formyl-(6R,S)-tetrahydrofolic acid, 5,10-methylene-(6SR)-tetrahydrofolic acid, 5,10-methenyl-(6R,S)-tetrahydrofolic acid, and 5-formimino-(6R,S)-tetrahydrofolic acid.

10 11. A composition comprising folic acid, a cobalamin compound, and betaine in amounts sufficient to exert a chondroprotective effect.

15 12. A composition according to claim 11, wherein said folic acid is present in an amount from 0.01 mg to 50 mg, said cobalamin compound is present in an amount from 0.0002 mg to 10 mg, and said betaine is present in an amounts from 50 mg to 20,000 mg.

20 13. A composition according to claim 12, wherein said folic acid is present in an amount from 0.1 mg to 5 mg, said cobalamin compound is present in and amount from 0.002 mg to 1 mg, and said betaine is present in an amounts from 500 mg to 2000 mg.

14. A method of treating an arthritic condition comprising administering to a mammal a composition comprising a reduced folate compound.

25 15. The method according to claim 14, wherein said arthritic condition comprises osteoarthritis.

16. The method according to claim 14, wherein the composition comprises 0.01 mg to 500 mg of said reduced folate compound.

17. The method according to claim 14, wherein the composition further comprises a cobalamin compound.

18. The method according to claim 17, wherein the composition comprises of 0.0002 mg
5 to 10 mg of said cobalamin compound.

19. The method of claim 14, wherein said composition does not comprise folic acid.

20. The method of claim 18, wherein said composition further comprises a betaine
10 compound.

21. The method according to claim 20, wherein the composition comprises 50 mg to
20,000 mg of said betaine compound.

15 22. The method of claim 14, wherein said reduced folate compound is 5-methyl
tetrahydrofolate.

23. The method of claim 14, wherein said reduce folate compound is 5-formyl tetra
hydrofolate.

20 24. The method of claim14, wherein said reduced folate is selected from the group
consisting of (6S)-tetrahydrofolic acid, 5-methyl-(6S)-tetrahydrofolic acid, 5-formyl-(6S)-
tetrahydrofolic acid, 10-formyl-(6R)-tetrahydrofolic acid, 5,10-methylene-(6R)-
tetrahydrofolic acid, 5,10-methenyl-(6R)-tetrahydrofolic acid, and 5-formimino-(6S)-
25 tetrahydrofolic acid.

25. The method of claim 14, wherein said reduced folate compound is administered at a
dose of 0.1-50 mg/day.

26. The method of claim 14, wherein said reduced folate is administered at a dose of 0.1-5 mg/day.

27. The method of claim 17, wherein said cobalamin compound is administered at a dose of 0.002-1 mg/day.

28. The method of claim 20, wherein said betaine compound is administered at a dose of 500-2000 mg/day.

10 29. A method of alleviating a symptom of arthritis, comprising administering to a mammal a composition comprising a reduced folate compound, wherein said mammal is diagnosed as suffering from or at risk of developing arthritis.

15 30. The method of claim 29, wherein said mammal is diagnosed as suffering from or at risk of developing osteoarthritis.

31. The method according to claim 29, wherein the composition comprises 0.01 mg to 500 mg of said reduced folate compound.

20 32. The method according to claim 29, wherein the composition comprises 0.1 mg to 50 mg of said reduced folate compound.

33. The method according to claim 29, wherein the composition comprises 0.1 mg to 5 mg of said reduced folate compound.

25 34. The method according to claim 29, wherein the composition further comprises a cobalamin compound.

35. The method according to claim 34, wherein the composition comprises of 0.0002 mg to 10 mg of said cobalamin compound.

5 36. The method according to claim 34, wherein the composition comprises of 0.002 mg to 1 mg of said cobalamin compound.

37. The method of claim 29, wherein said composition does not comprise folic acid.

10 38. The method of claim 34, wherein said composition further comprises a betaine compound.

39. The method according to claim 38, wherein the composition comprises 50 mg to 20,000 mg of said betaine compound.

15 40. The method according to claim 38, wherein the composition comprises 500 mg to 2000 mg of said betaine compound.

41. The method of claim 29, wherein said reduced folate compound is 5-methyl-tetrahydrofolate.

20 42. The method of claim 29, wherein said reduce folate compound is 5- formyl tetra hydrofolate.

25 43. The method of claim 29, wherein said reduced folate is selected from the group consisting of (6S)-tetrahydrofolic acid, 5-methyl-(6S)-tetrahydrofolic acid, 5-formyl-(6S)-tetrahydrofolic acid, 10-formyl-(6R)-tetrahydrofolic acid, 5,10-methylene-(6R)-tetrahydrofolic acid, 5,10-methenyl-(6R)-tetrahydrofolic acid, and 5-formimino-(6S)-tetrahydrofolic acid.

44. The method of claim 29, wherein said reduced folate compound is administered at a dose of 0.1-50 mg/day.

45. The method of claim 29, wherein said reduced folate compound is administered at a
5 dose of 0.1-5 mg/day.

46. The method of claim 34, wherein said cobalamin compound is administered at a dose of 0.002-1 mg/day.

10 47. The method of claim 38, wherein said betaine compound is administered at a dose of 500-2000 mg/day.

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